

Serial No. 10/602,930

PATENT

REMARKS

In the Office Action dated 19th September 2005 claims 1, 3 to 9, 12, 13, 22 and 23 are pending of which claims 1, 3 to 9, 12, 13, 22 and 23 were rejected. Specifically claims 1, 3, 5 to 9, 22 and 23 are rejected 35 USC 103(a) as being unpatentable over Baker (US 6814748).

In response to the rejection claim 1 has been amended to specify that the "stent affixed to and extending from the graft material" is an "exposed stent". Support for this terminology can be found on page 7 lines 1 and 2 for instance and Figure 1. It is clear from the description in this patent application that an exposed stent is one in which the majority of the stent is not on the graft material. As described on page 9 lines 23 and 24 and as illustrated in Figure 10 the stent only has about 2 to 3 mm overlapping the material of the graft. The term "exposed stent" is one which is understood in the relevant art as a stent which is not covered by the graft material. The stents in Baker which are illustrated in Figures 23, 24 and 25 are exposed stents but the stent illustrated in Figure 19 would not be referred to as an exposed stent. The problem faced by the present inventor is to securely fasten exposed stents, those with only a small portion overlapping the graft material, not the type of stent illustrated in Figures 19 and 20 of Baker which has a majority of its length on the graft material and can therefore have a number of stitches along the length of each strut. The strut 278 in Figure 19 of Baker, for instance, has stitching at four positions along its length. There is no teaching in Baker of how to stitch fully exposed stents of the type illustrated in Figures 23, 24 and 25 onto graft material. For this reason, in general, the teaching of Baker is not relevant to the problem faced by the present inventor.

Further claim 1 has also been amended to more particularly specify that there are two spaced apart fastenings at each apex of the stent graft. This wording is supported

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by the description at page 7 at lines 15 to 19 and Figure 2 and page 9 lines 11 to 28 and Figures 8 to 10.

We submit that no new subject matter has been added with either of these amendments. We submit that claim 1 is now more clear in defining the location of the stent and fastenings.

Claims 1, 3, 5 to 9, 22 and 23 are rejected under 35 USC 103(a) as being unpatentable over Baker (US 6814748) but we submit that a fair reading of Baker shows that a different construction is defined and that these claims are patentable over Baker. The examiner has particularly referred to Figure 19 and the corresponding description and argued that while Baker teaches only two single turns knotted off this would be essentially functionally equivalent to the single strand with two turns claimed. With respect we submit that applicant has clearly shown in its examples that a single turn is not functionally equivalent to two turns, see page 10 Table 1 in which the use of two turns gives about double the direct pull strength of a single turn. In addition as now more clearly defined there are two such fastenings at each apex. Hence Baker teaches the use of two single turn fastenings at a apex while the present invention describes, illustrates and claims two fastenings and two turns for each fastening at each apex and the examples show that there is a significant and important difference between these two fastening systems. The two are not essentially equivalent and not obvious and we submit that there is an inventive difference and that claims 1, 3, 5 to 9, 22 and 23 are patentable over Baker (US 6814748).

The Examiner has further argued that claims 3, 5, 6, 7, 8, 9, 22 and 23 do not distinguish over Baker (US 6814748).

With reference to claim 3 we acknowledge that various knot arrangements are shown in Baker but as claim 3 depends from a patentable claim as discussed above then this claim is also patentable.

With reference to claim 5 we note the Examiners reference to column 19 lines 14+ and that the stent in Baker is shown as inside the graft, see column 20 lines 58 to 61, but claim 5 refers to the knot arrangement being on the outside of the graft material and this

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in not illustrated in Baker. Hence we submit that claim 5 is distinguished over Baker and further as claim 5 depends from a patentable claim as discussed above then this claim is also patentable.

With reference to claim 6 we note the Examiners reference to column 23 lines 4+ but this description is referring to the tufts of fiber on the outside of the graft to assist with prevention of leaks rather than the material of the fastenings. Hence we submit that claim 6 is distinguished over Baker and further as claim 6 depends from a patentable claim as discussed above then this claim is also patentable.

With reference to claim 7 we note the Examiners reference to column 10 lines 4+ and we acknowledge that various graft materials are shown in Baker but as claim 7 depends from a patentable claim as discussed above then this claim is also patentable. With reference to claim 8 we note the Examiners reference to column 7 lines 1+ and we acknowledge that various stent types are shown in Baker but as claim 8 depends from a patentable claim as discussed above then this claim is also patentable.

With reference to claim 9 we note the Examiners reference to columns 10 and 11 and we acknowledge that self expanding stent types are shown in Baker but as claim 9 depends from a patentable claim as discussed above then this claim is also patentable.

With reference to claim 22 we submit that there is no disclosure in Baker of machine stitching to fasten the struts to the graft material and that there is a significant advantage in using a machine stitch because of the increased speed at which an exposed stent can be fastened to a graft material. Hence we submit that claim 22 is distinguished over Baker and further as claim 22 depends from a patentable claim as discussed above then this claim is also patentable.

With reference to claim 23 we submit that there is no teaching in Baker of at least five machine stitches to fasten the struts to the graft material. As mentioned in the previous paragraph there is not teaching of machine stitching. Hence we submit that claim 23 is distinguished over Baker and further as claim 23 depends from a patentable claim as discussed above then this claim is also patentable.

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We note that no specific objection has been raised against claim 4 and we submit that as this claim depends upon a claim which is novel and not anticipated by Baker then this claim is also novel and not anticipated.

Although the foregoing discussion is believed to be dispositive of the issues in this case, applicants' attorney requests a telephone interview with the Examiner to further discuss any unresolved issues remaining after the Examiner's consideration of this amendment and response.

Respectfully submitted,
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Date:

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